REMARKS

As a preliminary matter, it is noted that cited USP No. 5,815,698 to Holmann et al., which the Examiner relied on in the pending § 103 rejection, was not listed in the PTO-892 form. Accordingly, it is **AGAIN** respectfully requested that the Examiner list **USP No. 5,815,698 to Holmann et al.** in a PTO-892 form in the next Office Action to make the record clear that it was considered by the Examiner.

In order to expedite prosecution, Applicant's representative initiated a telephone interview with Examiner Pan. Applicant and Applicant's representative would like to thank Examiner Pan for his courtesy in conducting the interview and for his assistance in resolving issues. As a result of the interview, Examiner Pan tentatively agreed that the pending rejections would be obviated upon his further consideration and an updated prior art search. Applicant and Applicant's representative would again like to thank Examiner Pan for his support in this matter. A summary of the interview discussion follows.

In the Advisory Action dated January 11, 2008 (continuation page), the Examiner maintains the pending rejections based on the allegation that "applicant's specification never taught that instruction B and instruction E were equivalent." Accordingly, the Examiner asserts that because instructions B and E are different instructions but belong to the same instruction set, the Examiner can conclude that the claimed "equivalent instruction" means that the two instructions B and E belong to the same instruction set. According to this interpretation, the Examiner attempts to read the claimed invention onto the cited prior art (it should be noted that instructions B and E are disclosed as one exemplary embodiment supporting the claimed invention; the following remarks will refer to instructions B and E for ease of understanding

noting that this exemplary embodiment of the present invention is non-limiting, whereby the present invention embodies any instruction converted into another equivalent instruction in the manner described below).

However, as described in Applicant's specification, it is respectfully submitted that the Examiner's premise for making the aforementioned interpretation is false. That is, instructions B and E are equivalent in operational results. Specifically, page 17, lines 15-20 of Applicant's specification expressly discloses:

> [m]ultiple sets of instructions, such as those shown in Figure 5, are stored on the instruction exchange table 103... [e]ach of these instruction sets consists of a plurality of instructions that specify equivalent operations but use mutually different execution units.

As shown in Figure 5 and described in Applicants' specification, instructions B and E specify equivalent operations and can use mutually different execution units. As noted in Applicant's previous response filed December 17, 2007, the claimed instructions (e.g., instruction B and E) are equivalent similarly to how an amount of currency converted from one unit to another unit is equivalent (e.g., 1 dollar converted to an equivalent amount of yen; different currency but same value, etc.). Indeed, as described throughout Applicant's specification and prosecution history, one of the objects of the present invention is directed to enabling two instructions which designate the same execution unit to nonetheless be executed in parallel by converting one of the instructions into an equivalent instruction which designates a different execution unit. In this way, the present invention can make it possible to effect the same operational results as would be the case if executing the original two instructions in parallel.

As noted above, the Examiner's interpretation that "equivalent instruction" could mean that the two instructions are from the same instruction set was based on the false premise that

"applicant's specification never taught that instruction B and instruction E were equivalent." However, as now shown, Applicant's specification defines the term "equivalent instruction" on page 17, lines 15-20 as specifying equivalent operations, noting that Applicant's specification can be used as a dictionary to define terms recited in the claims (i.e., "equivalent instruction"). In this regard, it is respectfully submitted that such an interpretation is not tantamount to reading limitations from the specification into the claims, so that in the present case no further amendment to the claims is necessary. As the record is now clear as to the proper interpretation of "equivalent instruction," it is respectfully submitted that the pending claims are patentable over the cited prior art, as it is respectfully submitted that the Examiner's basis for making the pending rejections has been invalidated.

Indeed, it is respectfully submitted that the Examiner's interpretation of "equivalent instruction" as meaning an instruction from the same instruction set is grammatically incorrect. Namely, as recited in the claims, the term "equivalent" qualifies the term "instruction" ***itself***. There is no suggestion from the specification or the claims that the term "equivalent" qualifies where the instruction comes from (e.g., "same instruction set"). It is respectfully submitted that the Examiner's interpretation has improperly read into claim 7 the following language/amendment, "~~equivalent~~ instruction obtained from the same instruction set as the other of the two instructions" or something similar. As the claim language currently stands, however, the Examiner's interpretation would be in contradiction to the plain, ordinary meaning of the term "equivalent instruction" and would therefore have to be, at a minimum, supported as new lexicography by Applicant's specification. In the instant case, Applicant's specification does not support the Examiner's interpretation and in fact expressly supports the plain, ordinary meaning of the term "equivalent instruction" consistent with Applicant's interpretation stated above.

Based on the foregoing, it is respectfully submitted that the term "equivalent instruction" should be afforded its plain, ordinary meaning, especially when read in light of Applicant's specification which further reinforces such an interpretation. It follows that the Examiner's reliance on an "equivalent instruction" embodying "instructions in the same instruction set" is not valid, so that neither Phillips nor Holmann disclose or suggest the claimed *combination.*

Specifically, even assuming *arguendo* that the NOP and SUB instructions in Holmann belong to the same instruction set as relied on by the Examiner to allege that they are "equivalent," the NOP and SUB instructions by definition are expressly disclosed as effecting different operational results so that they are not equivalent. Phillips on the other hand, as previously noted, is completely silent as to converting one instruction to another equivalent instruction. Phillips merely discloses details to a 3-1 ALU and incidentally suggests its combination with a conventional 2-1 ALU so as to, at best, disclose conventional parallel processing. Phillips is completely silent as to the processing of the instructions to be executed as Phillips is directed to the internal configuration of the 3-1 ALU rather than instruction processing. It follows that Phillips is silent as to conversion of an instruction to be executed by the execution units into another equivalent instruction, much less suggest the particular configuration recited in claim 7 which can effect such a protocol.

Based on the foregoing, it is respectfully submitted that none of the cited prior art, alone or in combination, disclose or suggest the claimed combination, *inter alia*, "instruction parallelizing/executing means for executing the two instructions, which designate the first execution unit as a target, in parallel by allocating one of the two instructions to the second execution unit, wherein the parallelizing/executing means is configured to convert one of the two

instructions to another equivalent instruction that designates the second execution unit" as recited in claim 7.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed, either expressly or inherently (noting that "inherency may not be established by probabilities or possibilities", *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999)), in a single prior art reference, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the forgoing, it is submitted that the cited prior art does not anticipate claim 7, nor any claim dependent thereon. The Examiner is directed to MPEP § 2143.03 under the section entitled "All Claim Limitations Must Be Taught or Suggested", which sets forth the applicable standard for establishing obviousness under § 103:

> To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (citing *In re Royka*, 180 USPQ 580 (CCPA 1974)).

In the instant case, the pending rejection does not "establish *prima facie* obviousness of [the] claimed invention" as recited in claim 7 because the proposed combination fails the "all the claim limitations" standard required under § 103.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claim 7 is patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

Based on the foregoing, it is respectfully submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejections under 35 U.S.C. § 102/103 be withdrawn.

CONCLUSION

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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